

# UK Patent Application (19) GB (11) 2 190 234(13) A

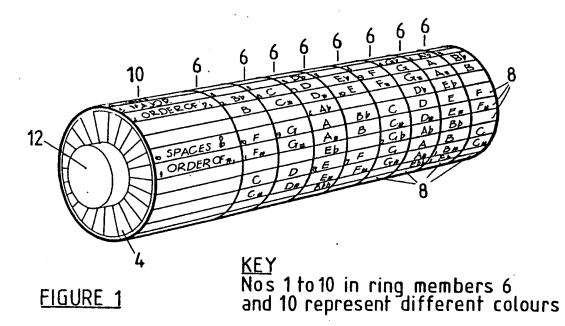
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## (54) Apparatus for giving musical information

(57) Apparatus (2) for giving musical information, which apparatus comprises a cylindrical support member (4) having thereon at least eight ring members (6), at least three of the ring members (6) being independently rotatable, and each ring member (6) being divided into a plurality of compartments (8) which are so marked that the ring members (6) can be rotatably aligned to give in an axial direction across the ring members readings of the major scales, the harmonic minor scales, the melodic minor scales ascending, and the melodic minor scales descending. The compartments may have different colours.



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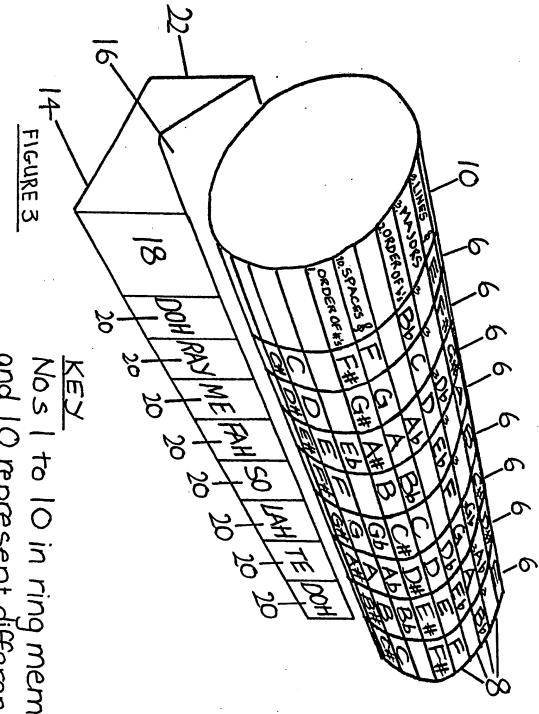
SPACES & ORDER OF # KEY Nos 1 to 10 in ring members 6 and 10 represent different colours 

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9 LINES & 3 MAJOR 1 ORDER OF #s 2 ORDER OF bs 8 SPACES 2: 4 HARMONIC MINOR KEY: NUMBERS 1 TO 10 IN RINGS AND RING 10 REPRESENT A DIFFERENT MELODIC MINOR + MELODIC MINOR LINES D COLOUR. - 10 2 86 10F 9 E ## Œ E<sub>b</sub> A # Ą D# ₽ P Ü #9 90 1 C# F# 8 86 **B**# A # D # Q 1 G# 3 Db # m m နှငြ 5 Fx 6 B # 9 B Αb Cx 6Fb D# ရ ရှ C# 86 **B**# HOE E 2 Db S G B B D# U ₽ G# S. C # 9 F 7 A C# 0 **T**  $\Box$ 86 E# Εb **>** ₽ D# ର ହୁ m ត # D D 4DE 5 B # 2Cb D# 9 G# 6 Bb C# G ဂ BB Fb F# E# Ab Þ 3 Ab 6Cb 18# # E E > D# D T X मि B 8 a B 48 Œ **A** AA D# ္ၾာ ရစ္ C# ဂ

IGURE 2



Nos I to 10 in ring members 6 and 10 represent different colours

#### **SPECIFICATION**

#### Apparatus for giving musical information

5 This invention relates to apparatus for giving musical information.

Students of music may be taught to various stages of competence. Irrespective of which musical instrument the students are taught to 10 play, they will need to acquire a knowledge of music such as the major scales, the harmonic minor scales, the melodic minor scales ascending, and the melodic minor scales descending. This knowledge may be obtained 15 from books but such books may be complicated to read and the students may find difficulty obtaining the information they want. Also, the students may find difficulty in readily and repeatedly referring to that information, 20 whilst they are in the process of learning.

It is an aim of the present invention to reduce the above mentioned problem and to facilitate the learning process for students of music.

25 Accordingly, this invention provides apparatus for giving musical information, which apparatus comprises a cylindrical support member having thereon eight ring members, at least three of the ring members being independently 30 rotatable, and each ring member being divided into a plurality of compartments which are so marked that the ring members can be rotatably aligned to give in an axial direction across the ring members readings of the major

35 scales, the harmonic minor scales, the melodic minor scales ascending, and the melodic minor scales descending.

Preferably, the two end ring members are fixed in position on the cylindral support mem-40 ber. The two end ring members may be rotatable if desired but they are preferably fixed for ease of forming start points.

Usually, at least some of the compartments will be marked by different notes and/or dif45 ferent colours, numbers or symbols. Usually the compartments will just be marked by the different notes and/or the different colours since the colours may be easier to identify than the numbers or the symbols but the 50 numbers or the symbols can be used in place of the colours if desired. The notes can be represented either alphabetically with letters of the alphabet or in musical notation with the notes as written in music.

The compartments may be so marked that when the ring members are rotatably aligned, they also give in the axial direction across the ring members a reading of one or more of (a) the order of sharps for key signature pur60 poses, (b) the order of flats for key signature purposes, (c) names of the lines in the bass clef, (d) names of the spaces in the bass clef, (e) names of the lines in the treble clef, and (f) names of the spaces in the treble clef.

The compartments may also be so marked

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that when the ring members are rotatably aligned they also give one or more of (g) diminished seventh chords, (h) arppegios, (i) broken chords, (j) relative majors, and (k) relative minors.

The apparatus of the invention may be such that the notes on the first and the eighth rings will always be the same, but the colours (or numbers or symbols if alternatively employed)

75 may vary depending upon the amount of musical information obtainable from the apparatus

The apparatus of the invention may include an instruction ring member for giving instructions on the required colour, number or symbol needed for the musical information desired to be obtained from the apparatus.

The instruction ring member may be fixed.

The instruction ring member may be at
tached to or it may be separate from the first

tached to or it may be separate from the first of the eight ring members.

The apparatus of the invention may include indexing means for enabling the rotatable ring member to be rotated compartment by compartment and to be held in a desired rotational position.

The indexing member may comprise co-operating protuberances and recesses. Other types of indexing member may be employed if desired.

The cylindrical support member may be made from a plastics material. Other materials may be employed for producing the cylindrical support member if desired.

100 The ring members are preferably made of a plastics material although other materials may be utilised if desired.

Preferably, the notes on the rings are etched or otherwise formed into the rings.

105 Each ring may have, for example, twenty four or twenty eight compartments.

Embodiments of the invention will now be described solely by way of example and with reference to the accompanying drawings in 110 which:

Figure 1 is a perspective view of first apparatus for giving musical information;

Figure 2 shows the ring members employed in the apparatus of Fig. 1 opened out in order to show the way in which individual compartments on the ring members are marked; and

Figure 3 is a perspective view of second apparatus for giving musical information.

Referring to Figs. 1 and 2, there is shown 120 apparatus 2 for giving musical information. The apparatus 2 comprises a cylindrical support member 4 having thereon eight ring members 6. All of the ring members 6 are independently rotatable.

125 Each ring member 6 is divided into a plurality of compartments 8. These compartments 8 are so marked that the ring members 6 can be rotatably aligned to give in an axial direction across the ring members 6 readings of 130 the major scales, the harmonic minor scales,

the melodic minor scales ascending, the melodic minor scales descending, the order of sharps for key signature purposes, the order of flats for key signature purposes, names of 5 the lines in the bass clef, names of the spaces in the bass clef, names of the lines in the treble clef, and names of the spaces in the treble clef.

It will be seen most easily from Fig. 2 that 10 at least some of the compartments in the ring members 6 are marked by different notes as shown and also by different colours as indicated by the number key 1-10, wherein each number represents a different colour. The col-15 ours can be of any desired choice. It will also be seen from Fig. 2 that the notes on the first and the eighth ring members 6 are the same. The colours on the first and the eighth ring members 6 vary depending upon the amount 20 of musical information obtainable from the apparatus 2.

The apparatus 2 may include an instruction ring member 10 for giving instructions on the required colour (or number or symbol) needed 25 for the musical information desired to be obtained from the apparatus. As shown in Fig. 1, the instruction ring member 10 is formed as an integral part of the first ring member 6 and it has compartments 8.

30 Although not shown in Figs. 1 and 2, the apparatus 2 advantageously includes indexing means for enabling the rotatable ring members 6 to be rotated compartment by compartment and to be held in a desired rotational position. 35 The indexing means may comprise co-operating protuberances and recesses although other types of indexing means may be employed.

As can be seen from Fig. 1, the cylindrical support member 4 is provided a knob 12 40 which facilitates the holding of the cylindrical member 4 whilst the ring member 6 and the instruction ring member 10 are being rotated. Another knob 12 may be provided at the other end of the apparatus 2 as viewed in Fig. 45 1 if desired.

It will be seen from Fig. 2 that the compartments 8 in each ring member 6 total twenty four.

The apparatus 2 is very simple and easy to 50 operate, it only being necessary to rotate the individual ring members 6 until a line of one single colour is shown in an axial direction across the ring members and then this line of colour will give the required information indi-55 cated in the instruction ring member 10, for example the major scales or the harmonic minor scales.

Referring now to Fig. 3, there is shown apparatus 2 for giving musical information. 60 The apparatus 2 is similar to the apparatus 2 shown in Figs. 1 and 2 and similar parts have been given the same reference numerals and their precise construction and operation will not again be given.

In Fig. 3, the compartments 8 in each ring

member 6 total twenty eight instead of the total of twenty four employed in the apparatus 2 shown in Figs. 1 and 2.

The apparatus 2 shown in Fig. 3 does not 70 have handles in the form of the knobs 12 and the apparatus 2 is supported as shown on a stand 14. The stand 14 has a V-shaped upper surface 16 which receives the apparatus 2. The stand 14 has a side wall 18 which is

divided into compartments 20 and which are marked Doh Ray Me Fah So Lah Te Doh as shown. The eight compartments 20 are repeated on the side wall 20 opposite the side wall 18. As will be appreciated, the eight

80 compartments 20 on the side walls 18,22 relate to the eight compartments 6 and the musical information in the compartments 20 are the names of the various notes in any music scale.

85 It is to be appreciated that the embodiments of the invention described above with reference to the accompanying drawings have been given by way of example only and that modifications may be effected. Thus, for

90 example, the apparatus 2 shown in Figs. 1-2 and 3 could be provided with more than the illustrated eight ring members 6 to give additional musical information such for example as diminished seventh chords. Also, the appara-

95 tus 2 shown in Fig. 3 could be provided with indexing means of the type mentioned above for use in connection with the apparatus 2 shown in Figs. 1 and 2. As the indexing means is operated, a clicking sound may be

heard as the protuberances move in and out of the recesses.

### **CLAIMS**

- 1. Apparatus for giving musical informa-105 tion, which apparatus comprises a cylindrical support member having thereon eight ring members, at least three of the ring members being independently rotatable, and each ring member being divided into a plurality of com-
- partments which are so marked that the ring members can be rotatably aligned to give in an axial direction across the ring members readings of the major scales, the harmonic minor scales, the melodic minor scales ascend-
- 115 ing, and the melodic minor scales descending. 2. Apparatus according to claim 1 in which the two end ring members are fixed in position on the cylindrical support member.
- 3. Apparatus according to claim 1 or claim 120 2 in which at least some of the compartments are marked by different notes and/or different colours, numbers or symbols.
- 4. Apparatus according to any one of the preceding claims in which the compartments 125 are so marked that when the ring members are rotatably aligned, they also give in the axial direction across the ring members a reading of one or more of (a) the order of sharps for key signature purposes, (b) the or-

130 der of flats for key signature purposes, (c)

names of the lines in the base clef, (d) names of the spaces in the base clef, (e) names of the lines in the treble clef, and (f) names of the spaces in the treble clef.

5. Apparatus according to claim 4 in which the compartments are so marked that when the ring members are rotatably aligned they also give one or more of (g) diminished seventh chords, (h) arppegios (i) broken chords,
 10 (j) relative majors, and (k) relative minors.

6. Apparatus according to any one of the preceding claims in which the notes on the first and the eighth rings are always the same.

- 7. Apparatus according to any one of the 15 preceding claims and including an instruction ring member for giving instructions on the required colour, number or symbol, needed for the musical information desired to be obtained from the apparatus.
- 8. Apparatus according to claim 7 in which the instruction ring member is fixed.
- Apparatus according to claim 7 in which the instruction ring member is attached to or is separate from the first of the eight ring 25 members.
- 10. Apparatus according to any one of the preceding claims and including indexing means for enabling the rotatable ring member to be rotated compartment by compartment and to 30 be held in a desired rotational position.
  - Apparatus according to claim 10 in which the indexing means comprises co-operating protuberances and recesses.
- 12. Apparatus according to any one of the35 preceding claims in which each ring has twenty four or twenty eight compartments.
  - 13. Apparatus for giving musical information, substantially as herein described with reference to the accompanying drawings.

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